

## WEST Search History



DATE: Sunday, November 14, 2004

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
	<i>DB=USPT; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L28	l26 and priorit\$4	2
<input type="checkbox"/>	L27	l2 and priorit\$4	15
<input type="checkbox"/>	L26	6308205[uref]	13
<input type="checkbox"/>	L25	6308205.pn.	1
<input type="checkbox"/>	L24	5220380.pn. or 5184179.pn.	2
	<i>DB=PGPB; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L23	(determ\$4 or calculat\$ or find\$4 or judg\$4) with priorit\$4 near5 order with (service or maintain\$6) with (printer or apparatus or equipment or copier or printer/copier or device)	9
<input type="checkbox"/>	L22	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (service or maintain\$6) with (printer or apparatus or equipment or copier or printer/copier or device)	8
	<i>DB=USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L21	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (service or maintain\$6) with (printer or apparatus or equipment or copier or printer/copier or device)	6
	<i>DB=USPT; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L20	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (service or maintain\$6) with (printer or apparatus or equipment or copier or printer/copier or device)	8
<input type="checkbox"/>	L19	L18 and l13	1
<input type="checkbox"/>	L18	L17 and l12	783
<input type="checkbox"/>	L17	358/1.15.ccls.	1606
<input type="checkbox"/>	L16	l12 same (based or depend\$4) with (character\$6 or type or color or image or speed)	15
<input type="checkbox"/>	L15	l3 same (based or depend\$4) with (character\$6 or type or color or image or speed)	5
<input type="checkbox"/>	L14	L13 and l12	3
<input type="checkbox"/>	L13	709/223.ccls.	1606
<input type="checkbox"/>	L12	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (printer or apparatus or equipment or copier or printer/copier or device)	284
<input type="checkbox"/>	L11	(determin\$4 or judg\$3) with priorit\$4 near5 order with first adj5 (printer or apparatus or equipment or copier or printer/copier) same second adj5 (printer or apparatus or equipment or copier or printer/copier)	4

<input type="checkbox"/>	L10	l9 and priorit\$4	1
<input type="checkbox"/>	L9	5305457[uref]	9
<input type="checkbox"/>	L8	(determin\$4 or judg\$3) with priorit\$4 near5 order with first adj5 (printer or apparatus or equipment or copier or printer/copier)same second adj5 (printer or apparatus or equipment or copier or printer/copier)	4
<input type="checkbox"/>	L7	determin\$6 same priorit\$4 with order same (servic\$3 or maintain\$6) same (printer or copier or printer/copier)	38
<input type="checkbox"/>	L6	priorit\$4 with order with (servic\$3 or maintain\$6) with (printer or copier or printer/copier)	1
<input type="checkbox"/>	L5	priorit\$4 near5 order with (servic\$3 or maintain\$6) near5 (printer or copier or printer/copier)	0
<input type="checkbox"/>	L4	priorit\$4 near5 order with (servic\$3 or maintain\$6) near5 (device or printer or copier or printer/copier)	42
<input type="checkbox"/>	L3	priorit\$4 near5 (servic\$3 or maintain\$6) near5 (device or printer or copier or printer/copier)	432
<input type="checkbox"/>	L2	priorit\$4 near5 (servic\$3 or maintain\$6) near5 (device or printer or copier or printer/copier)same (trouble or problem)	15
<input type="checkbox"/>	L1	priorit\$4 same (servic\$3 or maintain\$6) same (device or printer or copier or printer/copier)	3207

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<input type="checkbox"/>	L19	L18 and l13	1
<input type="checkbox"/>	L18	L17 and 112	783
<input type="checkbox"/>	L17	358/1.15.ccls.	1606
<input type="checkbox"/>	L16	112 same (based or depend\$4) with (character\$6 or type or color or image or speed)	15
<input type="checkbox"/>	L15	13 same (based or depend\$4) with (character\$6 or type or color or image or speed)	5
<input type="checkbox"/>	L14	L13 and 112	3
<input type="checkbox"/>	L13	709/223.ccls.	1606
<input type="checkbox"/>	L12	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (printer or apparatus or equipment or copier or printer/copier or device)	284
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<input type="checkbox"/>	L10	19 and priorit\$4	1
<input type="checkbox"/>	L9	5305457[uref]	9
<input type="checkbox"/>	L8	(determin\$4 or judg\$3) with priorit\$4 near5 order with first adj5 (printer or apparatus or equipment or copier or printer/copier) same second adj5 (printer or apparatus or equipment or copier or printer/copier)	4
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<input type="checkbox"/>	L20	(determ\$4 or calculat\$ or find\$4) with priorit\$4 near5 order with (service or maintain\$6) with (printer or apparatus or equipment or copier or printer/copier or device)	8
<input type="checkbox"/>	L19	L18 and 113	1
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END OF SEARCH HISTORY



US005220380A

**United States Patent** [19]

Hirata et al.

[11] **Patent Number:** 5,220,380[45] **Date of Patent:** Jun. 15, 1993

[54] **CONTROL SYSTEM FOR COPYING MACHINES WITH IMPROVED COMMUNICATION FUNCTION FOR CENTRALIZED CONTROL UNIT**

[75] **Inventors:** Sumiaki Hirata, Aichi; Kazunobu Maekawa, Toyokawa, all of Japan

[73] **Assignee:** Minolta Camera Kabushiki Kaisha, Osaka, Japan

[21] **Appl. No.:** 912,661

[22] **Filed:** Jul. 14, 1992

**Related U.S. Application Data**

[63] Continuation of Ser. No. 742,626, Aug. 7, 1991, abandoned.

**Foreign Application Priority Data**

Aug. 10, 1990 [JP] Japan ..... 2-213275

[51] **Int. Cl.<sup>5</sup>** ..... G03B 21/00

[52] **U.S. Cl.** ..... 355/204; 340/825.51; 358/401; 358/408; 379/96; 379/100

[58] **Field of Search** ..... 340/825.5, 825.51; 355/200, 202, 203, 204; 358/400, 401, 402, 403, 404, 405, 406, 407, 408, 468; 379/92, 96, 97, 98, 100

**References Cited****U.S. PATENT DOCUMENTS**

4,058,672	11/1977	Crager et al.	358/407
4,167,322	9/1979	Yano et al.	355/204 X
4,322,813	3/1982	Howard et al.	364/900
4,390,953	6/1983	Johnstone et al.	364/474
4,497,037	1/1985	Kato et al.	364/900
4,583,834	4/1986	Seko et al.	355/206
4,739,366	4/1988	Braswell et al.	355/208
4,766,548	8/1988	Cedrone et al.	364/479
4,797,706	1/1989	Sugishima et al.	355/200 X
4,903,016	2/1990	Murai et al.	340/825.5
4,979,132	12/1990	Sugimoto	364/520
4,994,926	2/1991	Gordon et al.	358/400
4,996,703	2/1991	Gray et al.	379/40
5,077,582	12/1991	Kravette et al.	355/206

**FOREIGN PATENT DOCUMENTS**

54-142559 8/1984 Japan .

63-301667 12/1988 Japan .

**OTHER PUBLICATIONS**

Lynn S. Ritter, "Remote Diagnostic—Tool Kit of the Future", 1989, pp. 1-6, Dataquest Research Newsletter.

*Primary Examiner*—Michael L. Gellner

*Assistant Examiner*—P. Stanzione

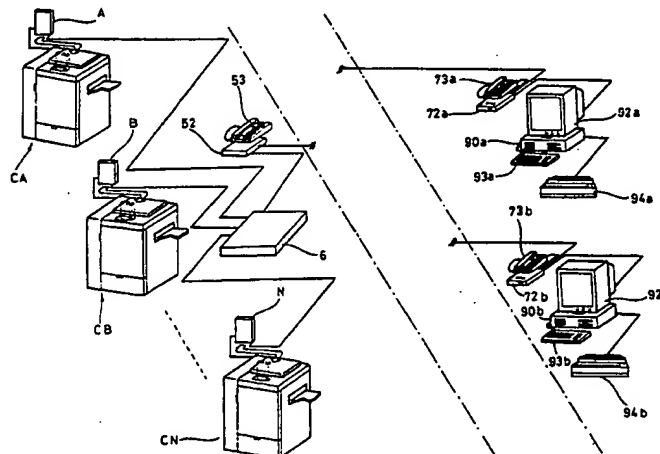
*Attorney, Agent, or Firm*—Burns, Doane, Swecker & Mathis

[57]

**ABSTRACT**

A copying machine control system according to the present invention includes a plurality of data terminals collecting data related to a plurality of copying machines, respectively, a centralized control unit for communicating data with each data terminal through a communication network, and a communication control unit for connecting the plurality of data terminals and the communication network. Each of the data terminals includes a request device for requesting the communication control unit communication with the centralized control unit when predetermined transmission condition including one with high priority and one with low priority is satisfied, a transmitting device for transmitting the priority of the transmission condition to the communication control unit when the predetermined transmission condition is satisfied, and a communication device for communicating with the centralized control unit when communication with the centralized control unit is permitted by the communication control unit. The communication control unit includes a first controller for, when request for communication is caused by only one of the data terminals, permitting the data terminal to communicate with the centralized control unit, and a second controller for, when requests for communication are caused from a plurality of the data terminals, permitting a data terminal having transmission condition with the highest priority to communicate with the centralized control unit.

9 Claims, 24 Drawing Sheets



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